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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,669	01/17/2002	Kent D. Vincent	10005745-1	1501

7590

05/20/2003

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

GUADALUPE, YARITZA

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/051,669

Applicant(s)

VINCENT ET AL.

Examiner

Yaritza Guadalupe

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2002 and 30 September 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 - 20 are rejected under 35 U.S.C. 103 ( a ) as being unpatentable over Vincent (US 6,556,470 ) in view of Bohn (US 6,429,422 ).

Vincent discloses a system comprising a rewritable medium ( 200 ) having a bistable, electrochromic, colorant susceptible to localized electrical fields associated with said medium (See Column 11, lines 33 – 49 ), an electrode subsystem producing said localized electrical fields wherein said fields are associated with data to be printed. Vincent further discloses said electrochromic colorant comprising at least one layer of a molecular colorant coating ( 201 ) wherein molecules of the coating are at least bichromal and subjectable to bistable switching between color states under influence of said localized electric fields ( See Column 13, lines 59 – 67 ). Vincent also discloses said system comprising molecules that exhibit an electric field induced band gap change, occurring via chemical bonding change ( See Column 12, lines 1 – 11). Vincent also discloses said colorant incorporates at least one layer of a first plurality of

Art Unit: 2859

micro-capsules having bichromal, bistable colorant within the microcapsules and said medium has a colorant on each printing surface. Vincent discloses a system configured for a portable, hand-held, hard copy apparatus.

Vincent does not disclose the scanning navigation subsystem ( 12 ) for positioning said data on said medium as stated in claim 1. Vincent does not disclose the electrode subsystem and navigation subsystem further comprising means for downloading, storing, sequencing, and printing text and images as stated in claims 4 and 5.

Regarding claims 1 and 4 – 5 : Bohn discloses a system including a rewritable medium (20) with text ( 22 ) and a portable scanner system ( 10 ) having a navigation subsystem further comprising means for downloading, storing, sequencing, and printing text and images, wherein said electrode subsystem and navigation subsystem are configured and housed in a portable, hand-held, hard copy apparatus ( 10 ). Bohn also discloses having means for scanning an original document and for providing a data set representative of said original document as said data to be printed. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a portable scanner as taught by Bohn to the system disclosed by Vincent in order to provide a high resolution imaging device for increasing the quality of printable images and allow high resolution reproduction of images.

The method as stated in claims 11 – 20 will be met during the regular operation of the system disclosed by Vincent and Bohn.

3. Claims 21 – 33 are rejected under 35 U.S.C. 103 ( a ) as being unpatentable over Ohki (US Pub. No. 2002/0001032 ) in view of Vincent ( US 6,556,470 ).

Ohki discloses a portable scanning printer device comprising a hand held housing ( 1 ) adapted for handheld use and mounted within said housing, a navigation subsystem ( 30 ) and a data port ( 3, 4, 50 ) for transmitting data and connecting every electronic circuitry associated with said tracking and said data. As best understood, Ohki device must include a plurality of print-heads included in the printer device ( 40 ). Ohki device further includes processor means (3) and memory means ( 4 ) connected to said processor means.

Ohki does not disclose an electrode array fixedly aligned for printing data rasters, and a navigation subsystem for tracking motion of said electrode array as stated in claim 21. Ohki does not particularly disclose said electrode array comprising a plurality of print-heads tuned to provide pixel-sized, localized electrical fields as stated in claims 22 - 24. Ohki does not disclose the molecular colorant layer as stated in claims 25 – 28.

Regarding claims 21 – 33 : Vincent discloses a system having a bistable, electrochromic, colorant susceptible to localized electrical fields associated with said medium ( See Column 11, lines 33 – 49 ), an electrode subsystem producing said localized electrical fields wherein said fields are associated with data to be printed. Vincent further discloses said electrochromic colorant comprising at least one layer of a molecular colorant coating ( 201 ) wherein molecules of the coating are at least bichromal and subjectable to bistable switching between color states under influence of said localized electric fields ( See Column 13, lines 59 – 67 ). Vincent also discloses said system comprising molecules that exhibit an electric field induced band gap change, occurring via chemical bonding change ( See Column 12, lines 1 – 11). Vincent also discloses said colorant incorporates at least one layer of a first plurality of micro-capsules having bichromal, bistable colorant within the microcapsules and said medium has a colorant on each printing surface. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add an electrode array as taught by Vincent to the device disclosed by Ohki in order to increase the resolution and quality of the images.

The method for scanning and printing and the method of manufacturing a hand – held scanning and printing apparatus as stated in claims 34 – 37 will be met from the regular operation and process of manufacturing the device disclosed by Ohki and Vincent.

*Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references are considered of relevance to the present application :

- a. Harkin ( US 6,327,376 )
- b. Fishkin et al. ( US Pub. No. 2003/0076343 )
- c. Schreurs et al. ( US Pub. No. 2003/0058765 )

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaritza Guadalupe whose telephone number is (703)305 -5676.

The examiner can normally be reached on 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-4467 for regular communications and (703)872-9318 for After Final communications.

Art Unit: 2859

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



Yaritza Guadalupe  
Patent Examiner  
Art Unit 2859  
May 15, 2003

DIEGO F.F. GUTIERREZ  
SUPERVISOR PATENT EXAMINER  
TECHNOLOGY CENTER 2800